

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A method of managing quality of service in a mobile radio network in which protocols for communication over terrestrial interfaces comprise a radio network layer and a transport network layer and wherein quality of service management includes quality of service management linked to the radio network layer and quality of service management linked to the transport network layer, said method comprising:

sending, from a first network element to a second network element, by means of the radio network layer signaling protocol, at least one parameter representative of transport quality of service or of quality of service for the transport network layer,

managing, by the second network element, the transport quality of service according to said at least one parameter for transport quality of service management for uplink transmission over an Iub interface between a controlling radio network controller and a Node B.

2. (original): A method according to claim 1, wherein said first network element is a controlling radio network controller.

3. (original): A method according to claim 2, wherein said second network element is a Node B or a base station.

4. (previously presented): A method according to either claim 2, wherein said radio network layer signaling protocol is a Node B Application Part protocol applicable to the Iub interface between the controlling radio network controller and the Node B.

5. (canceled).

6. (original): A method according to claim 1, wherein said first network element is a serving radio network controller.

7. (original): A method according to claim 6, wherein said second network element is a drift radio network controller.

8. (previously presented): A method according to claim 6, wherein said radio network layer signaling protocol is a Radio Network Subsystem Application Part signaling protocol applicable to the Iur interface between the serving radio network controller and the drift radio network controller.

9. (canceled).

10. (previously presented): A method according to claim 1, wherein said at least one parameter representative of transport quality of service is a specific parameter intended to indicate a transport quality of service level.

11. (previously presented): A method according to claim 1, wherein said at least one parameter representative of transport quality of service is at least one radio access bearer parameter.

12. (previously presented): A method according to claim 11, wherein said at least one radio access bearer parameter is the transfer delay.

13. (previously presented): A method according to claim 11, wherein said at least one radio access bearer parameter is the traffic handling priority.

14. (previously presented): A method according to claim 11, wherein said at least one radio access bearer parameter is the traffic class.

15. (previously presented): A method according to claim 11, wherein said at least one radio access bearer parameter is copied or translated from the RANAP protocol to the NBAP protocol, or from the RANAP protocol to the RNSAP protocol.

16. (previously presented): A method according to claim 1, wherein said at least one parameter representative of transport quality of service is at least one parameter associated with a transport quality of service level or at least one radio access bearer parameter.

17. (previously presented): A method according to claim 16, wherein said at least one parameter associated with a transport quality of service level or at least one radio access bearer parameter is a time adjustment parameter, the lowest values of said parameter being assigned to

connections having higher transfer delay and/or traffic handling priority constraints and the higher values of said parameter being assigned to connections having higher transfer delay and/or traffic handling priority constraints.

18. (previously presented): A method according to claim 17, wherein said time adjustment parameter is the time of arrival window start parameter.

19. (previously presented): A method according to claim 16, wherein said at least one parameter associated with a level of transport quality of service or at least one radio access bearer parameter includes at least one parameter representative of the number of dedicated channels allocated to a connection, a high number of dedicated channels being allocated to connections having high transfer delay and/or traffic handling priority constraints and a lower number of dedicated channels being allocated to connections having lower transfer delay and/or traffic handling priority constraints.

20. (currently amended): A radio network controller CRNC comprising:
~~control means for~~ a controller which controlling controls a Node B; and
~~data signalling means for signalling~~ a data signaler which signals to the Node B in accordance with a signalling protocol of a radio network layer corresponding to the NBAP protocol applicable to the Iub interface between the radio network controller CRNC and Node B at least one parameter representing the quality of service for the transport network layer, for uplink transmission over the Iub interface between the radio network controller CRNC and the Node B.

21. (previously presented): The radio network controller CRNC according to claim 20, wherein said at least one parameter is signaled to the Node B in a Radio Link Setup Request message.

22. (previously presented): The radio network controller CRNC according to claim 20, wherein said at least one parameter is a specific parameter intended to indicate a transport QoS level.

23. (currently amended): A radio network controller SRNC comprising:
~~control means for controlling~~ a controller which controls a Node B; and
~~signalling means for signalling~~ a signaler which signals to a radio network controller DRNC ~~by means of~~ via a signalling protocol of a radio network layer corresponding to the RNSAP applicable to the Iur interface between radio network controller SRNC and radio network controller DRNC at least one parameter representing the quality of service for the transport network layer, for uplink transmission over the Iur interface between the radio network controller SRNC and the radio network controller DRNC and downlink transmission over an Iub interface between the radio network controller DRNC and a Node B.

24. (previously presented): The radio network controller SRNC according to claim 23, wherein said at least one parameter is signaled to the Node B, through the radio network controller DRNC in a Radio Link Setup Request message.

25. (previously presented): The radio network controller SRNC according to claim 23, wherein said at least one parameter is a specific parameter intended to indicate a transport QoS level.

26. (previously presented): The radio network controller SRNC according to claim 24, wherein said at least one parameter is a specific parameter intended to indicate a transport QoS level.

27. (currently amended): A radio network controller DRNC comprising:
~~means for receiving~~ a receiver which receives from a radio network controller SRNC ~~by~~
~~means of a~~ via a signalling protocol of a radio network layer corresponding to the RNSAP
protocol applicable to the Iur interface between radio network controller SRNC and radio
network controller DRNC at least one parameter representing the quality of service for the
transport network layer,

~~means for using~~ wherein said at least one parameter ~~for~~ relates to transport quality of
service management for the transmission in the uplink direction over the Iur interface between
radio network controller SRNC and radio network controller DRNC and in the downlink
direction over the Iub interface between radio network controller DRNC and Node B.

28. (currently amended): The radio network controller according to claim 27, ~~further~~
~~comprising~~ ~~means for receiving~~ wherein said at least one parameter is received in a Radio Link
Setup Request message.

29. (previously presented): The radio network controller according to claim 27, wherein said at least one parameter corresponds to a specific parameter intended to indicate a transport QoS level.

30. (previously presented): The radio network controller according to claim 28, wherein said at least one parameter corresponds to a specific parameter intended to indicate a transport QoS level.

31. (currently amended): A Node B comprising ~~means for receiving~~ a receiver which receives from a radio network controller CRNC in accordance with a signalling protocol of a radio network layer corresponding to the NBAP protocol applicable to the Iub interface between radio network controller CRNC and Node B at least one parameter representing the quality of service for the transport network layer ~~and means for using~~, wherein said at least one parameter ~~for relates to~~ managing the transport quality of service for transmission in the uplink direction over the Iub interface between the radio network controller CRNC and Node B.

32. (currently amended): The Node B according to claim 31, ~~including means for receiving wherein~~ said at least one parameter is received in a Radio Link Setup Request message.

33. (previously presented): The Node B according to claim 31, wherein said at least one parameter corresponds to a specific parameter intended to indicate a transport QoS level.

34. (previously presented): The Node B according to claim 32, wherein said at least one parameter corresponds to a specific parameter intended to indicate a transport QoS level.

35. (previously presented): A method according to claim 1, further comprising:

managing, by the second network element, the transport quality of service according to said at least one parameter for transport quality of service management for uplink transmission over an Iur interface between a serving radio network controller and a drift radio network controllers.

36. (previously presented): A method according to claim 35, further comprising:
managing, by the second network element, the transport quality of service according to said at least one parameter for transport quality of service management for downlink transmission over an Iub interface between a drift radio network controller and a Node B.